

ABSTRACT OF THE DISCLOSURE

[00212] A power flow controller for controlling the flow of active and reactive power on an AC transmission line between an input and output includes first and second power converters, coupled to each other to exchange active power and coupled to the input and output. A controller is coupled to the power converters and controls the converters to provide a controlled quantity of active power to the output, and draw this controlled quantity of active power from the input of the power flow converter. Electric current is diverted at a node between the input and the output, allowing independent control of currents at the input and output. In a preferred embodiment, the two power converters are interconnected in series. A controllable susceptance is connected in shunt at a node between the converters to divert the current.